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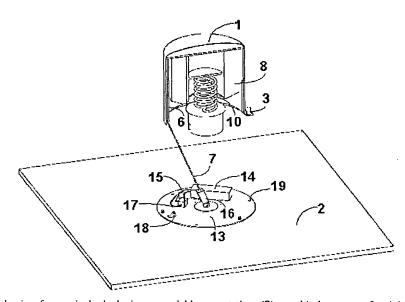
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(54) Title: PASSIVE DEPLOYMENT MECHANISM FOR SPACE TETHERS



(57) Abstract: Mechanism for passively deploying expendable space tethers (7) on orbit, by means of an initial separation impulse only, provided by a simple spring system (10) that is part of the mechanism itself. The passive deployment of the space tether and a tethered end-mass is provided by the particular mechanism devised, having very low deployment friction and resistance. Tether deployment brake towards the final part of deployment is produced by a daisy-like brake (12), stored within the winding of the fixed tether spool so that it is automatically deployed (opened) and starts its deployment braking or resistance function from a planned point of the tether deployment in space.

INTERNATIONAL SEARCH REPORT

Internation Application No
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A. CLASS	IFICATION OF SUBJECT	T MATTER	
IPC 7	B64G1/64	B64G1	/22

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ccc} {\rm Minimum\ documentation\ searched\ (classification\ system\ followed\ by\ classification\ symbols)} \\ {\rm IPC\ 7\ B646\ B65H} \\ \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, COMPENDEX, INSPEC-

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CARROLL J A: "SEDS Deployer Design and Flight Performance" AIAA PAPER, 'Online! no. 93-4764, 1993, XP002322656 Retrieved from the Internet: URL:http://www.tetherapplications.com/papers/aiaa93-4764.pdf> 'retrieved on 2005-02-18! cited in the application page 2, column 1, paragraph 1 - column 2, paragraph 2; figure 2	1,3
A	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 08, 6 October 2000 (2000-10-06) & JP 2000 128097 A (MITSUBISHI HEAVY IND LTD), 9 May 2000 (2000-05-09) abstract	1,3

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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Date of the actual completion of the international search 30 March 2005	Date of mailing of the international search report 13/04/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nt, Fax: (+31-70) 340-3016	Authorized officer Calvo De No, R

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Patent document cited in search report				Patent family member(s)	Publication date
JP 2000128097	Α	09-05-2000	NONE		
JP 04159199	Α	02-06-1992	NONE		
US 4083520	Α	11-04-1978	NONE		

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